

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			ATTY. DOCKET NO. LO29-016	SERIAL NO. 104512100	
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)					APPLICANT Melzer et al.		
					FILING DATE <i>10/21/04</i>	GROUP <i>AU 2873</i>	
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>CS</i>	AA	4,195,913	04/80	Dourte et al.		<i>7</i>	
<i>CS</i>	AB	4,277,141	07/81	Kleiber		<i>7</i>	
<i>CS</i>	AC	4,389,115	06/83	Richter		<i>7</i>	
<i>CS</i>	AD	6,166,868	12/00	Holderer et al.		<i>7</i>	
<i>CS</i>	AE	4,038,971	08/77	Bezborodko		<i>7</i>	
<i>CS</i>	AF	4,236,296	12/80	Woolhouse et al.		<i>7</i>	
<i>CS</i>	AG	4,740,276	04/88	Marmo et al.		<i>7</i>	
<i>CS</i>	AH	5,891,317	04/99	Teichmann et al.		<i>7</i>	
<i>CS</i>	AI	6,369,959	04/02	Trunz et al.		<i>7</i>	
<i>CS</i>	AJ	6,503,383	01/03	Holderer et al.		<i>7</i>	
<i>CS</i>	AK	4,710,276	12/87	Kull		<i>7</i>	
<i>CS</i>	AL	3,917,385	11/75	Caswell		<i>7</i>	
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
<i>CS</i>	AM	WO99 66542	12/99	PCT		<i>7</i>	
<i>CS</i>	AN	DE 100 15 953	10/00	Germany		<i>7</i>	
<i>CS</i>	AO	WO86 05281	09/86	PCT		<i>7</i>	
<i>CS</i>	AP					<i>7</i>	
<i>CS</i>	AQ					<i>7</i>	
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
<i>CS</i>	AR	Ellis, "Low-cost Bimorph Mirrors in Adaptive Optics," Imperial College of Science, Technology & Medicine, University of London, 1999.					
<i>CS</i>	AS	Sato et al., Adaptive PVDF piezoelectric deformable mirror system," Applied Optics, Vol. 19, No. 9, 1980, pages 1430-1434.					
<i>CS</i>	AT	Sato et al., "Multilayered deformable mirror using PVDF films," Applied Optics, Vol. 21, No. 20, 1982, pages 3664-3668.					
EXAMINER	<i>LOTTA BEN</i>		DATE CONSIDERED		<i>6/9/06</i>		
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. LO29-016	SERIAL NO. 10/1512100
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Melzer et al.	
				FILING DATE 10/21/04	GROUP AU2873

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>hr</i>	AA	6,275,344	08/01	Holderer			
	AB	6,307,688	10/01	Merz et al.			
	AC	6,580,570	06/03	Becker et al.			
	AD	6,603,615	08/03	Melzer et al.			
	AE	5,428,482	06/95	Bruning et al.			
	AF	5,537,262	07/96	Aoki et al.			
	AG	6,252,712	06/01	Furter et al.			
	AH	6,229,657	05/01	Holderer et al.			
	AI	6,552,862	04/03	Dicker			
	AJ	3,837,125	09/74	Johnson			
	AK	6,373,552	04/02	Braat et al.			
<i>hr</i>	AL	6,259,571	07/02	Holderer et al.			

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AM							
	AN							
	AO							
	AP							
	AQ							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

<i>hr</i>	AR	Sato et al., "Transmission-type PVDF 2-D optical phase modulator," Applied Optics, Vol. 20, No. 2, 1981, pages 343-350.					
<i>hr</i>	AS	Ro et al., "Vibration Control of Plates Using Self-Sensing Active Constrained Layer Damping," SPIE Vol. 3672, 1999, pages 200-209.					
<i>hr</i>	AT	Krug et al., Application of a 6 x 8 Silicon APD Array and Hybrid Electronics for Scannerless 3D Imaging Ladar, NATO/IRIS Active Systems, 1995, Vol. II, pages 79-89.					

EXAMINER

LOTHA BEN

DATE CONSIDERED

6/9/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.

DT01 Rec'd PCT/PT 21 OCT 2094

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. LO29-016	SERIAL NO. 10/1512		
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Melzer et al.			
				FILING DATE 10/21/04	GROUP AU 2873		
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>lry</i>	AA	4,959,531	09/90	Marino			
<i>lry</i>	AB	6,727,984 B2	04/04	Becht (LO33-001)			
<i>lry</i>	AC	4,380,391	04/83	Buser, et al.			
<i>lry</i>	AD	6,246,822 B1	06/01	Kim, et al.			
<i>lry</i>	AE	5,079,414	01/92	Martin			
<i>lry</i>	AF	4,674,874	06/87	Halldorsson et al.			
<i>lry</i>	AG	4,672,439	06/87	Florence et al.			
<i>lry</i>	All	6,521,892 B2	02/03	Emanuel et al.			
<i>lry</i>	AI	4,865,454	09/89	Lazzarini et al.			
<i>lry</i>	AJ	4,202,605	05/80	Heinz			
<i>lry</i>	AK	5,986,795	11/99	Chapman, et al.			
<i>lry</i>	AL	5,428,482	06/95	Bruning, et al.			
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
	AM						
	AN						
	AO						
	AP						
	AQ						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
<i>lry</i>	AR		Burns et al., "Compact, Multichannel receiver using InGaAs APDs for single pulse, eye-safe, laser radar imagery," SPIE Vol. 3065.				
<i>lry</i>			1997, pages 22-29.				
<i>lry</i>	AS		Schulz et al., "Calibration of an interferometer for testing cylindrical surfaces," 1995 Elsevier Science, pages 512-520.				
	AT						
EXAMINER <i>LOHA BEN</i>		DATE CONSIDERED <i>6/9/06</i>					
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. LO29-016	SERIAL NO. 10/512 100			
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Melzer et al.				
				FILING DATE 10/21/04 GROUP AU2873				
U.S. PATENT DOCUMENTS								
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
<i>LR</i>	AA	5,026,977	06/91	Hubbard, Jr.				
	AB	6,411,426	06/02	Mechan et al.				
	AC	5,719,846	02/98	Matoba et al.				
	AD	6,496,466	12/02	Lee et al.				
	AE	6,553,379	07/03	Yokoyama et al.				
	AF	6,566,627	05/03	Brandinger et al.				
	AG	4,295,710	10/81	Heinz				
	AH	5,485,053	01/96	Boz				
	AI	6,633,107	10/03	Calabro et al.				
	AJ	5,724,017	03/98	Pia et al.				
	AK	6,296,811	10/01	Sasaki				
<i>LR</i>	AL	6,405,533	06/02	Rostegar et al.				
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	
	AM						No	
	AN							
	AO							
	AP							
	AO							
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
	AR							
	AS							
	AT							
EXAMINER LOHIA BEN		DATE CONSIDERED 6/9/06						
<small>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>								

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. LO29-016	SERIAL NO. 118512100			
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Melzer et al.				
				FILING DATE 10/21/04	GROUP AU 2873			
U.S. PATENT DOCUMENTS								
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
<i>LM</i>	AA	4,849,668	07/89	Crawley et al.				
	AB	6,252,334	06/01	Nye et al.				
	AC	6,108,121	03/00	Mansell et al.				
	AD	6,208,407 B1	03/01	Loopstra				
	AE	6,160,628	12/00	Inoue				
	AF	4,348,090	09/82	Iizuka				
	AG	6,392,825	05/02	Trunz et al.				
	AH	6,473,247	10/02	Keller et al.				
	AI	6,501,605	12/02	Moriya				
	AJ	6,653,887	11/03	Haeusser-Boehm et al.				
	AK	6,337,484	01/02	Loopstra et al.				
<i>LM</i>	AL	6,054,784	04/00	Sperling et al.				
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AM							
	AN							
	AO							
	AP							
	AQ							
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
	AR							
	AS							
	AT							
EXAMINER <i>Lotta BEN</i>				DATE CONSIDERED <i>6/9/06</i>				
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

Sheet 6 of 10
DT01 Rec'd PCT/PTC 21 OCT 2004

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			ATTY. DOCKET NO. LO29-016	SERIAL NUMBER 107512100	
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)					APPLICANT Melzer et al.		
					FILING DATE 10/21/04 GROUP AU 2873		
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>LR</i>	AA	5,870,133	02/99	Naiki			
	AB	5,784,355	07/98	Abe			
	AC	5,642,237	06/97	Miyawaki et al.			
	AD	5,204,712	04/93	Bouwer et al.			
	AE	4,967,088	10/90	Stengl et al.			
	AF	4,953,965	09/90	Iwase et al.			
	AG	4,408,874	10/83	Zinky et al.			
	AH	4,060,315	11/77	Heinz			
	AI	3,077,958	02/63	Grimsey			
	AJ	6,594,057	07/03	Drake et al.			
	AK	6,509,670	01/03	Jeong et al.			
<i>LR</i>	AL	6,478,434	11/02	Streetman et al.			
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
	AM						
	AN						
	AO						
	AP						
	AQ						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER <i>LOHA BEN</i>			DATE CONSIDERED <i>6/9/06</i>				
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. LO29-016	SERIAL NO. 10/512100		
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT Metzer et al.		FILING DATE 10/21/04 GROUP AU2873			
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>AS</i>	AA	6,428,173	08/02	Dhuler et al.			
<i>AS</i>	AB	5,438,451	08/95	Schweizer			
<i>AS</i>	AC	5,132,979	07/92	Erbert			
<i>AS</i>	AD	5,074,654	12/91	Alden et al.			
<i>AS</i>	AE	4,969,726	11/90	Koning			
<i>AS</i>	AF	4,226,507	10/80	Fuschetto			
<i>AS</i>	AG	3,802,781	04/74	Wright			
<i>AS</i>	AI	4,932,770	06/90	Coravoly			
<i>AS</i>	AI	4,705,369	11/87	Humpal			
<i>AS</i>	AJ	6,290,363	09/01	Masutani			
<i>AS</i>	AK	5,694,257	12/97	Arnone et al.			
<i>AS</i>	AL	5,529,277	06/96	Ostaszewski			
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes
	AM						No
	AN						
	AO						
	AP						
	AQ						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER	LOTHA BEN		DATE CONSIDERED	6/9/06			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. LO29-016	SERIAL NO. 10/512100		
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Metzer et al.			
				FILING DATE 10/21/04	GROUP AU 2873		
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>LH</i>	AA	5,400,184	03/95	Kuklo			
	AB	4,826,304	05/89	Guch et al.			
	AC	4,722,592	02/88	Stolfi			
	AD	3,879,105	04/75	Broche et al.			
	AE	5,986,827	11/99	Hale			
	AF	5,210,650	05/93	O'Brien et al.			
	AG	4,162,120	07/79	Moreno			
	AH	5,339,720	08/94	Pellarin et al.			
	AI	4,403,421	09/83	Shepherd			
	AJ	4,092,518	05/78	Merard			
	AK	5,414,557	05/95	Phillips			
<i>LH</i>	AL	6,729,062	05/04	Thomas et al.			
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
	AM						Yes
	AN						No
	AO						
	AP						
	AR						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER	<i>LOHA BEN</i>			DATE CONSIDERED	<i>6/9/06</i>		
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Sheet 9 of 10
DT01 Rec'd PCT/PTO 21 OCT 2004

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			ATTY. DOCKET NO. LO29-016	SERIAL NO. 10/6512100	
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)					APPLICANT Melzer et al.		
					FILING DATE 10/21/04	GROUP AU2873	
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>CG</i>	AA	6,537,479	03/03	Colea			
<i>C</i>	AB	4,932,778	06/90	Parra			
<i>C</i>	AC	6,144,511	11/00	Umetsu et al.			
<i>C</i>	AD	5,157,555	10/92	Reno			
<i>C</i>	AE	4,871,237	10/89	Anzai et al.			
<i>C</i>	AF	6,252,648	06/01	Hase et al.			
<i>C</i>	AG	6,411,368	06/02	Matsumoto et al.			
<i>C</i>	AII	5,025,284	06/91	Komoriya et al.			
<i>C</i>	AI	6,628,371	09/03	Ishikawa			
<i>C</i>	AJ	6,614,504	09/03	Aoki			
<i>C</i>	AK	6,341,006	01/02	Murayama et al.			
<i>CG</i>	AL	6,646,713	11/03	Ishii			
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes
		AM					No
		AN					
		AO					
		AP					
		AR					
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER	<i>LOHA BEN</i>			DATE CONSIDERED	<i>6/9/06</i>		
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

DTC1 Rec'd PCT/PTO 21 OCT 2004

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. LO29-016	SERIAL NO. 101512100		
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Melzer et al.			
				FILING DATE 10/21/04	GROUP AU 2873		
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>LM</i>	AA	6,445,516	09/02	Osterried			
<i>LM</i>	AB	4,659,225	04/87	Takahashi			
<i>LM</i>	AC	6,449,106	09/02	Spinali			
	AD						
<i>LM</i>	AE	2002/0163741 A1	11/02	Shibasaki			
<i>LM</i>	AF	2002/0176094 A1	11/02	Petasch et al.			
<i>LM</i>	AG	2002/0021903 A1	02/02	Ito et al.			
<i>LM</i>	AH	2002/0167740 A1	11/02	Osterried et al.			
	AI						
	AJ						
	AK						
	AL						
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes
	AM						No
	AN						
	AO						
	AP						
	AR						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
	AR						
	AS						
	AT						
EXAMINER	LOHA BEN			DATE CONSIDERED	6/9/06		
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

2/14/05

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. LO29-016	SERIAL NO. 10/512,100		
LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Frank Melzer et al.			
				FILING DATE October 21, 2004	GROUP AU 2873 Unassigned		
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Sub-class	Filing Date If Appropriate
<i>AM</i>	AA	6,844,994 B2	01/05	Melzer et al.	<i>7</i>		
	AB	6,829,107 B2	12/04	Osterried			
	AC	6,825,914 B2	11/04	Schroeder et al.			
	AD	6,816,325 B1	11/04	Becker et al.			
	AE	6,798,588 B2	09/04	Vogt			
	AF	6,791,768 B2	09/04	Rau			
	AG	6,768,600 B2	07/04	Dieker			
	AH	6,773,369 B1	05/04	Stacklies et al.			
	AI	6,717,742 B2	04/04	Weber			
	AJ	6,667,839 B2	12/03	Hartmaier et al.			
	AK	6,667,255 B2	12/03	Hexels			
	AL	6,594,093 B2	07/03	Moeller et al.			
	AM	6,538,829 B2	03/03	Rau et al.			
	AN	6,466,380 B2	10/02	Bischoff			
	AO	6,445,515 B2	09/02	Moennig			
	AP	6,195,201 B1	02/01	Koch et al.			
<i>AM</i>	AQ	5,737,137	04/98	Cohen et al.			
EXAMINER LOHA BEN				DATE CONSIDERED 6/9/06			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)APPLICANT
Frank Melzer et al.FILING DATE
October 21, 2004GROUP AU 2873
Unassigned

2/14/05

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Sub-class	Filing Date If Appropriate
<u>W</u>	AA	5,581,605	12/96	Murakami et al.	<u>7</u>		
<u>W</u>	AB	5,361,292	11/94	Sweatt	<u>7</u>		
<u>W</u>	AC	5,339,346	08/94	White	<u>7</u>		
	AD						
	AE						
	AF						
	AH						

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub-class	Translation	
							Yes	No
<u>W</u>	AI	DE 101 20 446 A1	11/02	Germany	<u>7</u>			x
<u>W</u>	AJ	DE 100 53 587 A1	05/0	Germany	<u>7</u>			x
<u>W</u>	AK	DE 199 35 568 A1	02/01	Germany	<u>7</u>			x
<u>W</u>	AL	EP 1 026 547 A2	01/00	EPO	<u>7</u>			
<u>W</u>	AM	DE 199 03 807 A1	11/99	Germany	<u>7</u>			x
<u>W</u>	AN	EP 0 939 341 A2	02/99	EPO	<u>7</u>			
<u>W</u>	AO	EP 0 939 341 A3	02/99	EPO	<u>7</u>			

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

	A R							
	A S							
	A T							

EXAMINER

LOHA BEN

DATE CONSIDERED

6/9/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.